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- <110> Yen, Frances Erickson, Mary Ruth Fruebis, Joachim Bihain, Bernard
- <120> Methods Of Screening For Compounds That Modulate the LSR-Leptin Interaction and Their Use in the Prevention and Treatment of Obesity-Related Diseases
- <130> 70.US2.REG
- <140> 09/668,558
- <141> 2000-09-22
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- <151> 1999-09-22
- <160> 106
- <170> Patent.pm
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GIu	Lys	GIU	Leu			Pne	Asp	Pro	350		Add	. Сту	PIC	355	Ser	
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ggc	Ara	yuş Val	gay Glu	Arc	, gcc . Δla	Met	Ser	. gaa . Glu	Val	Thr	Ser	Lev	His	Glu	Asp	
Gry	птэ	vuı	360		, ,,,,,,			365					370	)	-	
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acc	TTC Dho	gag	cag	aca Th~	gcc Ala	rgg Trn	gga Gla	ı gac	: agt	- 99a - Glu	ugtg vVal	, cat Tvi	. La( TVi	. cyc	tct Ser	/13
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Pro	Ala	Ser	Ala	Ile	Gln	Val	Thr	Val	Ser	Asp	Pro	Tyr 45	His	Val	Val	
Ile	Leu		Gln	Pro	Val	Thr		Pro	Cys	Thr		Gln	Met	Ser	Asn	
ml	50	ml	17.0 ]	Dwa	710	55	Tlo	Trn	Lare	ጥኒንን	60 . Lve	Ser	Phe	Cvs	Arg	
65					70					75					80	
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Cys	Gln				Arg	Thr	Val	Arg	, Val	. Val	Ala	Thr	Lys	Glr	Gly	
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	130					135	i				140	) -				
Thr	Gly	Asn	Ala	Asp	Leu	Thr	Phe	e Glu	ı Glr			Trp	Gly	/ Asp	Ser	
145					150			_		155			. 7		160	
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Phe	. Val			. Val	Cys	. Lei			Lei	ı Let		ı Phe		ı Lev	ı Leu	
	210		-		- 63	215		. D	. tr4 -	, mh-	220		- Car	י ייט	r Vəl	
Gly 225		Cys	Trp	Cys	3 Gir		s Cys	s Pro	H18 כ	235		s cys	- су	- т.	val 240	
		Pro	Cys	з Суя			Lys	в Суя	з Суя			o Glu	ı Ala	a Lei	ı Tyr	
_	-		_	-												

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Val																	
	.0 > 1 .1 > 2				•												
	.2> E		ıs no	rveg	jicus												
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gcg	, tgt	gct	999	g gcg	g cct	gac	tco	cac	c cca	1 a gct	aco	gte	ggt	5 c tto	gtg	2	283
Ala	ı Cys	s Ala	a Gly	/ Ala	a Pro	) Asp	Se	r His	Pro	O Ala	a Thi	c va.	ι va.	r hue	e Val		

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Aob	FIC	n-9	490		0	9		495			_	_	500			
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Thi	: Asr	Ser	Glr			r Arg	l GT	ı Arç			т г	з гу	3 ASI	тьец 569	ı Ala	
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cto	g agt	cgg	g gaa	agt	tta	gto	gro	c tga	a CCC	cacgi		yca	Lycas	JCC		1702
Lei	ı Sei	r Arg	g Glu		: ье	ıvaı	. va.	57!	=							
			570		. + + -		1			7222	s tt	raad	ccta	ataa	aaatgtc	2022
						yyaai	Caa	La Li	Lyac	gaaa.		caag	Jour			2040
taa	atca	caaa	aaaa	adda	1											
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<400> 11

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	Pro	Pro	Pro	Pro	Pro 220	Ата	мес	TTE	PIO	225	Gry	PIO	FIO	ı y ı	230	
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ggg gcg cc Gly Ala Pr 10 ctc atc at Leu Ile II cct gac cc Pro Asp Pr tgc acc ta Cys Thr Tr 60 aag tat aa Lys Tyr Lr 75 gcc agc g Ala Ser V	et ggc To Gly Et tac Tyr Ec tac Tyr 45 Ac cag Yr Gln Ag tcg Ys Ser Ec gac Asp	tcc cac Ser His 15 tgc cca Cys Pro 30 cac gta His Val atg agg Met Set ttc tg Phe Cy aac ca Asn G1 95 tat qt	c ccg s Pro a gac o Asp a gtg l Val c aat r Asn t cgg s Arg 80 g ctc n Leu	Met 1 gcc Ala cgt Arg atc Ile acc Thr 65 gac Asp	Ala acc Thr gcc Ala ctg Leu 50 ctc Leu cgt Arg	acg Thr agt Ser 35 ttc Phe aca Thr gtt Val cag Gln	atc Ile 20 gcc Ala cag Gln gcc Ala ctg Leu 100 agcc	Ala 5 ttc Phe atc Ile cca Pro Asp 85 gcg Ala i Ala	Ser gtg Val cag Glm atco Ala Ala cgc	tgt Cys Gys Val Gaca Thr 55 Gys Val C tto Gaca Gly	Cys ctt Leu acc Thr 40 cta Leu stcc Ser Asr	ttt Phe 25 gtg Val cac His tgg Trp cct Pro 105 agg	100 148 196 244 292
ggg gcg cc Gly Ala Pr 10 ctc atc at Leu Ile II cct gac cc Pro Asp Pr tgc acc ta Cys Thr Tr 60 aag tat aa Lys Tyr Lr 75 gcc agc g Ala Ser V	et ggc To Gly Et tac Tyr Ec tac Tyr 45 Ac cag Yr Gln Ag tcg Ys Ser Ec gac Asp	tcc cac Ser His 15 tgc cca Cys Pro 30 cac gta His Val atg agg Met Set ttc tg Phe Cy aac ca Asn G1 95 tat qt	c ccg s Pro a gac o Asp a gtg l Val c aat r Asn t cgg s Arg 80 g ctc n Leu	Met 1 gcc Ala cgt Arg atc Ile acc Thr 65 gac Asp	Ala acc Thr gcc Ala ctg Leu 50 ctc Leu cgt Arg	acg Thr agt Ser 35 ttc Phe aca Thr gtt Val cag Gln	atc Ile 20 gcc Ala cag Gln gcc Ala ctc Leu 100 cagc	Ala 5 ttc Phe atc Ile cca Pro Asp 85 gcg Ala i Ala	Ser gtg Val cag Glm atco Ala Ala cgc	tgt Cys Gys Val Gaca Thr 55 Gys Val C tto Gaca Gly	Cys ctt Leu acc Thr 40 cta Leu stcc Ser Asr	ttt Phe 25 gtg Val cac His Trp cct Pro 105 agg	100 148 196 244 292 340
ggg gcg cc Gly Ala Pr 10 ctc atc at Leu Ile II cct gac cc Pro Asp Pr tgc acc ta Cys Thr Tr 60 aag tat aa Lys Tyr Lr 75 gcc agc g Ala Ser V 90 ggc tac a Gly Tyr A	et ggc To Gly Et tac Tyr To tac Tyr To tac Tyr To tac Tyr	tcc cac Ser His 15 tgc cca Cys Pro 30 cac gta His Vai atg agg Met Sei ttc tg Phe Cy aac ca Asn Gl 95 tat gt Tyr Va 110 aaa ca	c ccg s Pro a gac b Asp a gtg l Val c aat c Asn t cgg s Arg s Arg g ctc n Leu g gag l Glu	Met 1 gcc Ala cgt Arg atc Ile acc Thr 65 gac Asp acc Cys	Ala acc Thr gcc Ala ctg Leu 50 ctc Leu cgt Arg Gln	acg Thr agt Ser 35 ttc Phe aca Thr gtt Val cag Gln gac Asp	atc Ile 20 gcc Ala cag Gln gcc Ala ctg Leu 100 sec	Ala 5 ttc Phe atc Ile cca Pro cct gao Asr 85 geg Ala cct val	Ser gtg Val cag Glm Val catco Ala Ala cag Glm Arc	tgt Cys Val Thr 55 Ste Val tto A Phe a Gly	Cys ctt Leu acc Thr 40 cta Leu gate Ser aacc Asr 120 ctac	ttt Phe 25 gtg Val cac His tgg Trp cct Pro 105 agg Arg	100 148 196 244 292 340
ggg gcg cc Gly Ala Pr 10 ctc atc at Leu Ile II cct gac cc Pro Asp Pr tgc acc ta Cys Thr Tr 60 aag tat aa Lys Tyr Ly 75 gcc agc g Ala Ser V 90 ggc tac a Gly Tyr A	et ggc o Gly et tac e Tyr ec tac fo Tyr 45 ac cag yr Gln o ag tcg ys Ser eg gac al Asp ac ccc sn Pro ec acc la Thr	tcc cac Ser His 15 tgc cca Cys Pro 30 cac gta His Vai atg agg Met Sei ttc tg Phe Cy aac ca Asn Gl 95 tat gt Tyr Va 110 aaa ca	c ccg s Pro a gac b Asp a gtg l Val c aat c Asn t cgg s Arg s Arg g ctc n Leu g gag l Glu	Met 1 gcc Ala cgt Arg atc Ile acc Thr 65 gac Asp acc Cys	Ala acc Thr gcc Ala ctg Leu 50 ctc Leu cgt Arg Gln cagg Gln	acg Thr agt Ser 35 ttc Phe aca Thr gtt Val cag Gln gac Asp 115 gtg	atc Ile 20 gcc Ala cag Gln gcc Ala ctg Leu 100 sec	Ala 5 ttc Phe atc Ile cca Pro cct gao Asr 85 geg Ala cct val	Ser gtg Val cag Glm Val catco Ala Ala cag Glm Arc	tgt Cys Val Thr 55 ty Val tto A Phe a Gly C act Thr A gao	Cys  ctt Leu acc Thr 40 cta Leu gato Tle ctc Cys cys Asr	ttt Phe 25 gtg Val cac His tgg Trp cct Pro 105 agg Arg	100 148 196 244 292 340
ggg gcg cc Gly Ala Pr 10 ctc atc at Leu Ile II cct gac cc Pro Asp Pr tgc acc ta Cys Thr Tr 60 aag tat aa Lys Tyr Lr 75 gcc agc g Ala Ser V 90 ggc tac a Gly Tyr A	et ggc o Gly et tac le Tyr lec tac ro Tyr 45 ac cag yr Gln o ag tcg yrs Ser atg gac al Asp ac ccc al Asp	tcc cac Ser His 15 tgc cca Cys Pro 30 cac gta His Val atg agg Met Ser ttc tg Phe Cy aac ca Asn Gl 95 tat gt Tyr Va 110 aaa ca Lys Gl	c ccg s Pro a gac o Asp a gtg l Val c aat c Asn t cgg s Arg 80 g ctc n Leu g gag l Glu	Met 1 gcc Ala cgt Arg atc Ile acc Thr 65 Gas Asp casc Asr	Ala acc Thr gcc Ala ctg Leu 50 ctc Leu cgt Arg Gln caggcc Ala 130	acg Thr agt Ser 35 ttc Phe aca Thr gtt Val cag Gln gac Asp 115 gtg	atc Ile 20 gcc Ala cag Gln gcc Ala ctc acc Ice Ice Ice Ice Ice Ice Ice Ice Ice I	Ala 5 ttc Phe atc Ile cca Pro ct gac Asp 85 gca Ala ct The Ct	Ser gtg Val cag Gln Gl Arg Gl Arg Gl Gly	tgt Cys Val Thr 55 gtg Val tto A Phe a Gly C act Thr A ggo A Cly Thr 13!	Cys  ctt Leu acc Thr 40 cta Leu gato Leu gato Tle ctc Caacc Val 120 cta co Tyr 5	ttt Phe 25 gtg Val cac His tgg Trp cct Pro 105 agg Arg tac Tyr	100 148 196 244 292 340

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A1a 170	GIn	Asp	Leu	Asp	175	ASII	ASII	Giu	AIG	180	AIG	OIU	204		185	
ctt	gat	tgg	ctc	ttt	gtg	gtc	gtg	gtc	tgc	ctg	gca	agc	ctc	ctc	ttc	628
Leu	Asp	Trp	Leu	Phe 190	Val	Val	Val	Val	Cys 195	Leu	Ala	Ser	Leu	Leu 200	Pne	
ttc	ctc	ctc	ctg	ggc	atc	tgc	tgg	tgc.	cag	tgc	tgt	CCC	cac	acc	tgc	. 676
			Leu 205					210					215			724
tgc	tgc	tat	gtc Val	aga	tgt	CCC	tgc	tgc	CCA	gac	aag	Cvs	Cvs	Cvs	Pro	724
Cys	Cys	220	vai	Arg	Cys	PIO	225	Cys	110	пор	2,0	230	-7-	-1-		
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Glu	Ala 235	Leu	Tyr	Ala	Ala	Gly 240	Lys	Ala	Ala	Thr	Ser 245	GTÀ	Val	Pro	ser	222
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Pro	Pro	Pro	Pro	Ala	Met	Ile	Pro	Met	Arg	Pro	Pro	Tyr	Gly	Tyr	Pro	
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Pro	Leu	Leu	Arg	Glu	Val	Āsp	Gly	Ser	Val	Ser	Ser	Glu	vai	Arg	Ser	
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ggc	tac	agg	atc	cag	gct	aac	cag	caa	gat Agn	gac	Ser	acy Met	Aro	Val	cta Leu	1012
GTA	315		116	GIII	Ата	320		0111	. ASP	TIDE	325	;	3			
tac	: tat	ato	gag	aag	gag	cta	gco	aac	tto	gat	. cct	tcc	cgg	cct	ggc	1060
Туг	Tyr	Met	Glu	Lys	Glu	Leu	Ala	. Asn	Phe	: Asr	Pro	Ser	Arg	Pro	GIY	
330	)				335					340		at=	200	· tcc	345 ctc	1108
cct	CCC	aat	ggc	cga	gtg val	gaa Glu	Arc	g gcc	: acc	g ayı : Sei	. gae . Glu	ı Val	. Thr	Ser	Leu	
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cat	gaa	gat	gac	t qq	cqa	tct	cgg	g cct	tco	agg	gct	: cct	gcc	cto	aca	1156
His	s Glu	ı Asp	Asp	Trp	Arg	ser,	Arg	g Pro	ser	Arg	g Ala	a Pro	375	а ьег	1 Thr	
			365	. ~~	. ~~	. +	, 221	370		tc.	e dat	. cac			aga	1204
Dro	c alc	ayy Arc	y yar y Ast	. gay	ı Glu	ı Tro	Ası	n Arc	His	s Sei	r Pro	Arg	Sei	Pro	Arg	
		380	)				385	5				390	)			
aca	a tg	ggag	g cag	g gaa	ccc	ctt	. caa	a gaa	a cag	g cca	a agg	g ggt	ggt	tgg	9 999	1252
Th	_		ı Glr	ı Glı	ı Pro			n Glu	ı Glı	n Pro	o Arg 40!	2 3 GT	y GI	/ Tr	Gly	
<b>+</b> ~:	39!		- cct			400		t ata	a gat	t ac			t gad	c ato	aac	1300
Se	r Gl	y Are	y CCI	Arc	a Ala	a Arc	Se:	r Va	l Ası	p Al	a Le	u Asj	o As	o Ile	e Asn	
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Ar	g Pr	o Gl	y Se			ı Sei	c Gl	y Ar	g Se:		r Pr	o Pro	o se:	r se:	r Gly 0	
~~	a	2 CC	a ca	430		- ac	. רר	t ac			t ca	c aq	c ca		t gac	1396
Ar	g Ar	a G]. a Gj.	y Are	a Ala	a Ty	r Ala	a Pr	o Pr	o Ar	g Se	r Ar	g Se	r Ar	g As	p Āsp	
	J	_ ·	44		•			45	0				45	5		

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Leu Tyr Asp Pro Asp Asp Pro Arg Asp Leu Pro His Ser Arg Asp Pr 460 465 470	O
cac tat tat gat gat ttg agg tct agg gat cca cgt gct gac ccc ag	ja 1492
His Tyr Tyr Asp Asp Leu Arg Ser Arg Asp Pro Arg Ala Asp Pro Ar 475 480 485	g
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Ser Arg Gln Arg Ser His Asp Pro Arg Asp Ala Gly Phe Arg Ser Ar	g
490 495 500 50	)5
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Asp Pro Gln Tyr Asp Gly Arg Leu Leu Glu Glu Ala Leu Lys Lys Ly	/S
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525 530 535	ac 1684
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teg cag gee teg agg gag egg agg atg aaa aag aat ttg gee etg ag	gc 1/32
Ser Gln Ala Ser Arg Glu Arg Arg Met Lys Lys Asn Leu Ala Leu Se	- L
222	1783
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Alg die bei bee van van	
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Ту	Tyr	Ası	) Asp	Let	ı Arg	Ser	Arc	Asp	Pro	Arg	g Āla	a Āsļ	p Pro	o Arg	g Ser		
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Gln Ser Val Ser Ser Lys Gln Arg Val Thr Gly Leu Asp Phe Ile Pro
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